

REMARKS

There is no indication in the Office Action that the formal drawings have been approved. Applicant respectfully requests approval of the formal drawings in the next Office Action.

Applicant disagrees with the rejection of Claims 1-29. To advance prosecution, however, Claims 1-29 have been canceled in favor of Claims 30-36.

Claims 30-36 are disclosed at page 7, lines 20-25 of the original specification and elsewhere in the specification. Page 7, lines 20-25 recites shortening to one-half the interval for selecting the common electrode. In this arrangement the common electrode provides a second selection pulse when the segment voltage level becomes V_{seg0} in each frame period. A first selection pulse is applied when image data is being applied and then the second selection pulse is applied when a constant voltage independent from the image data is applied.

Claims 30-36 are discussed below with respect to Yamashita, U.S. Patent No. 4 795 239 as applied in the previous Office Action to reject all of the claims under 35 USC §103.

In the Office Action, Yamashita is relied on for the disclosure of applying a sequence of selection pulses to a common electrode (common opposite electrode Vito), and applying to a segment electrode a voltage corresponding to image data (the source voltage SM'). The Office Action includes a statement providing "a second voltage of a constant value independent from the image data to the segment electrode in intervals where the selection pulses are not applied" (see SM' , beginning at the end of the voltage corresponding to the image data and where the gate pulse $G2'$ begins). This arrangement is illustrated in Figure 2 of Yamashita.

Applicant's Claim 30 recites "applying a voltage corresponding to image data to the nematic liquid crystal panel while applying a first selection pulse in each frame

period" and "applying a constant voltage independent from the image data to the nematic liquid crystal panel while applying a second selection pulse in each said frame period".

Yamashita applies a single selection pulse in each frame period. Further, as set forth in the quotation above in the previous Office Action, Yamashita discloses providing a constant voltage when selection pulses are not applied. Thus, Yamashita does not disclose or suggest applying a second selection pulse in each frame period, much less applying the second selection pulse when a constant voltage independent from the image data is applied.

For the above reasons, independent Claim 30, and Claims 31-34 dependent therefrom, distinguish Yamashita.

Applicant's Claim 34 further recites that "the liquid crystal display device comprises a combination of a nematic liquid crystal and backlight elements of the colors including red, green and blue". This arrangement is not disclosed in Yamashita.

Applicant's independent Claim 35 recites the steps of "applying a first selection pulse during a portion of the first time zone of the first frame period during the application of the voltage corresponding to image data" and "applying a second selection pulse during a portion of the second time zone of the first frame period during the application of the constant voltage independent from the image data". As discussed above, Yamashita does not disclose or suggest applying two selection pulses during a single frame period, much less applying a second selection pulse when a constant voltage independent from image data is applied. Further, Yamashita does not disclose or suggest applying a second selection pulse during a portion of the second time zone of the frame period.

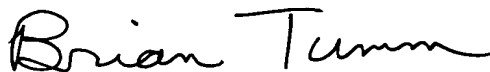
Dependent Claim 36 recites that "the first selection pulse and the second selection pulse each have a positive voltage value". As discussed above, Yamashita does not disclose or suggest first and second selection pulses during a

first frame period, much less the selection pulses each having a positive voltage value.

For the above reasons, Claims 35 and 36 distinguish Yamashita.

The Examiner is respectfully requested to reconsider the present application and to pass it to issue.

Respectfully submitted,



Brian R. Tumm

BRT/ad

FLYNN, THIEL, BOUTELL
& TANIS, P.C.
2026 Rambling Road
Kalamazoo, MI 49008-1631
Phone: (269) 381-1156
Fax: (269) 381-5465

| | |
|-------------------------|-----------------|
| Dale H. Thiel | Reg. No. 24 323 |
| David G. Boutell | Reg. No. 25 072 |
| Ronald J. Tanis | Reg. No. 22 724 |
| Terryence F. Chapman | Reg. No. 32 549 |
| Mark L. Maki | Reg. No. 36 589 |
| Liane L. Churney | Reg. No. 40 694 |
| Brian R. Tumm | Reg. No. 36 328 |
| Steven R. Thiel | Reg. No. 53 685 |
| Donald J. Wallace | Reg. No. 43 977 |
| Sidney B. Williams, Jr. | Reg. No. 24 949 |

Encl: Postal Card

136.05/04